

DOCUMENT RESUME

ED 050 528

EC 032 367

TITLE Behavior Modification: Exceptional Child Bibliography Series.  
INSTITUTION Council for Exceptional Children, Arlington, Va. Information Center on Exceptional Children.  
SPONS AGENCY Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.  
PUB DATE Feb 71  
NOTE 20p.  
EDRS PRICE MF-\$0.65 HC-\$3.29  
DESCRIPTORS \*Annotated Bibliographies, \*Behavior Change, \*Bibliographies, \*Exceptional Child Education, Handicapped Children, Operant Conditioning, Reinforcement

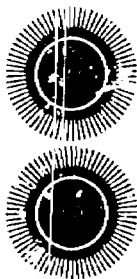
ABSTRACT

One in a series of over 50 similar listings relating to handicapped and gifted children, the bibliography contains 81 references selected from Exceptional Child Education Abstracts concerning behavior modification. The following information is provided for each entry (which includes research reports, conference papers, journal articles, texts, and program guides): bibliographical data, availability information, indexing and retrieval descriptors, and abstracts. Author and subject indexes are also provided. (RD)

EC032367

ED050528

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## BEHAVIOR MODIFICATION

### A Selective Bibliography

February 1971

CEC Information Center on Exceptional Children  
The Council for Exceptional Children  
Jefferson Plaza, Suite 900  
1411 S. Jefferson Davis Highway  
Arlington, Virginia 22202

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300,471

EC 032 367E

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## ABSTRACTS

## ABSTRACT 10199

EC 01 0199 ED 018 028  
 Publ. Date 67 70p.  
 Barnard, James W.; Orlando, Robert  
**Behavior Modification--a Bibliography.**  
 Institute Ment. Retard. And Int. Dev.,  
 Nashville, Tenn.  
 EDRS mf,hc

Descriptors: exceptional child research;  
 learning; behavior; bibliographies; be-  
 havioral sciences; methods; learning  
 theories; behavior change

Intended for persons having direct re-  
 sponsibility for behavior management in  
 educational and clinical settings, the  
 bibliography lists 506 entries on behav-  
 ior modification. Each item listed de-  
 scribes or illustrates specific methods of  
 behavior modification and is conceived  
 within some learning framework theory.  
 Arranged alphabetically by author, en-  
 tries date from 1928 to 1967, with  
 several still in press at the time the  
 bibliography was compiled. Most, how-  
 ever, are work of the 1960's. This  
 document is Volume IV, Number 3, of  
 the Institute on Mental Retardation and  
 Intellectual Development Papers. (TS)

## ABSTRACT 10567

EC 01 0567 ED 022 286  
 Publ. Date May 67 118p.  
 Walker, H'ill M.; Mattison, Robert H.  
**Identification and Treatment of So-  
 cial-Emotional Problems. Interim Re-  
 port.**  
 Oregon University, Eugene, College Of  
 Education  
 Office Of Education (DHEW), Washing-  
 ton, D. C., Bureau Of Research  
 EDRS mf,hc  
 OEG-4-6-061308-0571  
 BR 6-1308

Descriptors: exceptional child research;  
 emotionally disturbed; identification;  
 behavior; teaching methods; screening  
 tests; behavior rating scales; behavior  
 patterns; positive reinforcement; learn-  
 ing theories; reinforcement; behavior  
 change; observation; check lists; test  
 reliability; test validity; test construction

Three assessment instruments for dis-  
 turbed children were developed: a 50-  
 item behavior checklist which func-  
 tioned as a screening device; a 124-item  
 behavior rating scale which provided  
 frequency measures on indices of the  
 teacher's reaction and response to ex-  
 hibited behaviors; and a behavioral ob-  
 servation form which recorded task-oriented  
 behavior in 10-second intervals for 10-  
 minute periods. The checklist had a  
 split-half reliability of .98 and discrimi-  
 nated between disturbed and non-dis-  
 turbed children (p equals .001). The  
 rating scale reflected treatment differ-  
 ences which were known to exist (p  
 equals .01), and had an average inter-ra-

ter reliability of .935 for three judges on  
 the behavior of six subjects. Agreement  
 measures between independent observ-  
 ers using the observation form were .90  
 and above. A treatment model based  
 upon learning theory was developed to  
 modify the behavior of disturbed child-  
 ren in an educational setting. Various  
 response-reinforcement contingencies  
 and reinforcers were used with 11 dis-  
 turbed boys in grades 4,5, and 6 and  
 produced measureable change by reduc-  
 ing deviant behavior and increasing  
 time spent engaged in task-orientated  
 behavior. It was not possible to deter-  
 mine which treatment variables pro-  
 duced a given amount of behavior  
 change. The checklist, rating scale, and a  
 classification form are appended.  
 (Author)SN

## ABSTRACT 10705

EC 01 0705 ED N.A.  
 Publ. Date Apr 67 6p.  
 Martin, Garry L.; Powers, Richard B.  
**Attention Span: An Operant Condi-  
 tioning Analysis.**  
 Manitoba University, Winnipeg, St.  
 Paul's College;  
 Eastern Washington State College, Che-  
 ney  
 EDRS not available  
 Exceptional Children; V33 N8 P565-70  
 Apr 1967

Descriptors: exceptional child research;  
 behavior; learning disabilities; rein-  
 forcement; attention span; operant con-  
 ditioning; verbal operant conditioning;  
 attention control; minimally brain in-  
 jured; mentally handicapped; research  
 reviews (publications)

A discussion of short attention span,  
 which is often considered an unchanging  
 characteristic, focuses on an operant  
 conditioning analysis of attention span  
 which suggests an alternative view. In a  
 previously reported experiment involv-  
 ing lever pressing by retarded children  
 and fixed schedule reinforcement, the  
 stable pattern of responding was re-  
 covered after temporary extinction under  
 three test conditions. This experi-  
 ment and other research involving atten-  
 tion span are discussed. Research re-  
 sults support the view that short atten-  
 tion span can be lengthened by using rein-  
 forcers (rewarding events) to influence at-  
 tending behavior and allowing incom-  
 patible behavior to go unreinforced.  
 Implications are that operant condition-  
 ing provides teachers with a tool to  
 increase length of attention span and to  
 control behavior. (SB)

## ABSTRACT 10805

EC 01 0805 ED 025 084  
 Publ. Date Apr 67 403p.  
 Krasner, Leonard, Ed.; Ullmann, Leon-  
 ard P., Ed.  
**Research I Behavior Modification;**

**New Developments and Implications.**  
 EDRS not available  
 Holt, Rinehart And Winston, Inc., 353  
 Madison Avenue, New York, New York  
 10017 (\$10.50).

Descriptors: exceptional child research;  
 behavior; reinforcement; speech; psy-  
 chotherapy; behavior patterns; pathol-  
 ogy; behavior change; socially deviant  
 behavior; verbal operant conditioning;  
 behavioral science research; hypnosis;  
 medical case histories; computers; stut-  
 tering; social values; speech therapy

Fifteen articles by different authors dis-  
 cuss behavior modification in terms of  
 research, training, and social applica-  
 tion. Topics considered include the clas-  
 sification of behavioral pathology, the  
 extension of learning principles to hu-  
 man behavior, studies of normal and  
 deviant child behavior, operant condi-  
 tioning of two speech-deficient boys,  
 stuttering and fluency as manipulatable  
 operant response classes, studies of in-  
 terview speech behavior, verbal condi-  
 tioning and psychotherapy, and the hu-  
 man reinforcer in verbal behavior re-  
 search. Also provided are articles on  
 vicarious human reinforcements, the  
 reinforcement of individual actions in a  
 group situation, attempted behavior ma-  
 nipulation in a psychiatric ward, design-  
 ing neurotic computers, and modeling  
 procedures and hypnosis as modification  
 techniques. An introduction to research,  
 a summary, and implications are provid-  
 ed. (JD)

## ABSTRACT 10932

EC 01 0832 ED 025 891  
 Publ. Date 13 Sep 68 41p.  
 MacCubrey, Mary Katherine  
**Verbal Operant Conditioning of  
 Young Mongoloid Children. Final Re-  
 port.**  
 Saint Anne's School, Arlington Heights,  
 Massachusetts  
 Office Of Education (DHEW), Washing-  
 ton, D. C., Bureau Of Research  
 EDRS mf,hc  
 OEG-8-8-084038-4465(032)  
 RR-8-4038

Descriptors: exceptional child research;  
 mentally handicapped; verbal develop-  
 ment; behavior; operant conditioning;  
 case records; trainable mentally handi-  
 capped; mongolism; institutionalized  
 (persons); verbal ability; language skills;  
 group instruction; verbal operant con-  
 ditioning; measurement instruments; rein-  
 forcement; behavior change; language  
 usage; teaching methods; speech skills

Operant conditioning techniques were  
 used to modify verbal behavior in 18  
 institutionalized, trainable mentally  
 handicapped mongoloids with chronol-  
 ogy ages from 4-6 to 7-10 and mental  
 ages from 2.0 to 2.10. Two instruments  
 were constructed to evaluate language: a  
 language test and a speech rating scale.

Project leaders had no prior knowledge of the language test. The six children in group 1 received five 15- to 40-minute group conditioning sessions daily. Shaping was used to condition object and picture naming, descriptions of action pictures in word combinations, and discrimination of colors and polar opposites. Operant procedures were used to lengthen attention span and increase verbal production. The six children in group 2 spent 7 weeks in the enriched experimental environment, but received no conditioning; the six in group 3 remained in the institution. Five of six members of group 1 significantly increased their scores on the Stanford-Binet posttest; one from group 2 and none from group 3 increased significantly. On the speech rating scale, group 1 showed significantly greater improvement than group 2. Major changes were observed in the social behavior of the 12 subjects who resided in the research facility. (Author/KP)

#### ABSTRACT 11021

EC 01 1021 ED N.A.  
 Publ. Date Feb 67 4p.  
 White, James C., Jr.; Taylor, Donna J.  
**Noxious Conditioning As a Treatment for Rumination.**  
 Western Carolina Center, Morganton, North Carolina  
 EDRS not available  
 Mental Retardation; V5 N1 P30-3 Feb 1967

Descriptors: exceptional child research; mentally handicapped; behavior; reinforcement; operant conditioning; physical development; electrical stimuli; behavior change; institutionalized (persons); custodial mentally handicapped; negative reinforcement

Two severely mentally retarded, non-communicative ruminators, a 23-year-old female and a 14-year-old male, were administered electric shock as a consequence for ruminating gestures. The female was involved in the study for 30 days while the male was fully or partially involved for 2 1/2 months. The shock was a distracting device which interfered with the ruminating syndrome. However, the reduction in rumination was extremely variable from day to day. No functional relationship between shock and rumination was reported, as extraneous environmental factors also served to distract. At termination of the treatment, the female showed a 15% weight increase over her previous 45 pounds, a reduction in akinetic seizures, and an increase in liquid intake. The male subject showed a small weight gain, counteracting a 31 pound loss over several preceding months. (TL)

#### ABSTRACT 11107

EC 01 1107 ED N.A.  
 Publ. Date Jun 66 68p.  
 Haring, Norris G.; Whelan, Richard J.  
**The Learning Environment: Relationship to Behavior Modification and Implications for Special Education.**  
 The University of Kansas Symposium, Kansas University, Lawrence, School Of

Education  
 Office Of Education (L..EW), Washington, D. C.  
 EDRS not available  
 Kansas Studies In Education; V16 N2 Jun 1966

Descriptors: exceptional child research; mentally handicapped; achievement; behavior change; experimental programs; educable mentally handicapped; arithmetic; reading; academic achievement; reinforcement; classroom design; language arts; handwriting; classroom arrangement; behavior problems; individualized instruction; classroom environment; educational facilities

In the second year of a 4-year project, 17 mentally handicapped children, eight of whom were carry overs from the first year, participated in an experimental classroom. Their chronological ages ranged from 7-10 to 13-8, mental ages from 4-2 to 8-11, and IQ's from 50 to 72; their reading achievement scores ranged from 0 to 1.6 grade (mean .3), arithmetic scores from 0 to 1.8 (mean .5). Former teachers described their classroom behavior as marked by refusal to study or follow instructions, by tantrums, pouting, or poor attention. A classroom-laboratory which held from five to seven students at a time was designed with three study carrels, two work and three writing tables, six desks, a quiet room, an observation room, and a waiting room. All students received individualized instruction and had their time in the classroom increased as they learned to work productively. Reinforcement and programs following programed instruction principles were given. Tests at the end of the year indicated gains in reading skills (range 0 to 1.3, median .6 grade) and arithmetic (range .3 to 1.4, median .8). All could work productively alone for an hour or more and could engage in appropriate school conduct. Additional findings and implications are presented. (JD)

#### ABSTRACT 11184

EC 01 1184 ED 027 67;  
 Publ. Date 10 Jan 69 264p.  
 Woody, Robert H.  
**Behavioral Problem Children in the Schools: Recognition, Diagnosis, and Behavioral Modification.**  
 EDRS not available  
 Appleton-Century-Crofts, 440 Park Avenue South, New York, New York 10016 (\$5.00).

Descriptors: exceptional child education; behavior; behavior change; etiology; behavior problems; identification; counselors; psychologists; administrator role; counseling; psychotherapy; clinical diagnosis; psychoeducational processes; inservice education; standards; reinforcement; teacher role; positive reinforcement; negative reinforcement

Directed primarily to classroom teachers, school counselors, and school psychologists, the book considers the psychology of behavioral problem children and ways of coping with their behavior. Aspects of recognition and diagnosis

discussed are the school and the behavioral problem child, causes and characteristics of behavior problems, detection and referral, and psychoeducational diagnosis. Behavioral modification is described in terms of influencing and modifying behavior, types of behavior modification, general and specialized behavioral modification techniques, and implementing behavioral modification in the schools. Reference lists are provided throughout the text. (LE)

#### ABSTRACT 11202

EC 01 1202 ED N.A.  
 Publ. Date Apr 66 7p.  
 Quay, Herbert C. And Others  
**Remediation of the Conduct Problem Child in the Special Class Setting.**  
 EDRS not available  
 Exceptional Children; V32 N8 P509-15 Apr 1966

Descriptors: exceptional child education; behavior; emotionally disturbed; teaching methods; educational needs; special classes; problem children; behavior change; remedial instruction; individual characteristics; teaching techniques; behavior problems; socially deviant behavior; aggression; anti-social behavior; reinforcement; public schools; skill development; professional personnel

The principles and assumptions described are those which underlie an experimental special class for conduct problem children which has been developed cooperatively by an interdisciplinary University of Illinois research center and the Urbana Public Schools. A conceptualization of the nature of the children's behavior disorders is offered, and some principles of behavior modification and remediation of academic deficiencies are discussed. Some particular characteristics of the conduct problem child relevant to the education process are outlined. Empirical attempts at training visual orientation to the teacher in a group setting, individualized remediation of retardation in basic academic skills, and teaching social skills are described. Also considered are factors relevant to remedial efforts within the public school setting, including the problem of group versus individual techniques, the role of mental health professionals, the place of other than classroom treatment, the goals of the special class, and the utilization in the regular class of techniques developed in the special class. A bibliography lists 17 items. (JW)

#### ABSTRACT 11257

EC 01 1257 ED N.A.  
 Publ. Date Jun 69 4p.  
 Tardal, Leif; Buell, Joan  
**Parent Education in Managing Retarded Children with Behavior Deficits and Inappropriate Behaviors.**  
 Oregon University Medical School, Portland, Crippled Children's Division  
 EDRS not available  
 Mental Retardation; V7 N3 P10-3 Jun 1969

Descriptors: exceptional child education; mentally handicapped; parent education; behavior problems; home visits; parent participation; clinical diagnosis; reinforcement; behavior change

This article describes a behavioral program in which parents are taught to provide a special environment for their handicapped children. In each case goals are individualized to fit the problems and needs of the child and family. The parent is first encouraged to identify goals. These may include eliminating inappropriate behaviors and/or developing skills in their child. Through demonstrations and work with their own child, parents observe and practice principles of reinforcement and shaping. (Author)

#### ABSTRACT 11386

EC 01 1386 ED N.A.  
Publ. Date May 69 8p.  
Gardner, James M.  
**Behavior Modification Research in Mental Retardation: Search for an Adequate Paradigm.**  
Public Health Service (DHEW), Arlington, Virginia;  
National Institute Of Mental Health (DHEW), Bethesda, Maryland, Hospital Improvement Program  
EDRS not available  
American Journal Of Mental Deficiency; V73 N6 P841-51 May 1969

Descriptors: exceptional child research; mentally handicapped; behavior change; operant conditioning; research methodology; measurement techniques; control groups; sampling; research problems; research reviews (publications)

The methodology and results of research on the application of operant conditioning techniques to the modification of the behavior of mental retardates were examined. It was concluded that, to some extent, all the studies have violated one or more of the following requirements of good experimental design: exact specification of all relevant independent variables, proper sampling techniques, use of adequate controls and proper assessment of the dependent variable. Suggestions for future research were offered. (Author)

#### ABSTRACT 11540

EC 01 1540 ED 029 442  
Publ. Date 15 Dec 68 227p.  
Walder, Leopold O. And Others  
**Teaching Parents and Others Principles of Behavioral Control for Modifying the Behavior of Children. Final Report.**  
Institute For Behavioral Research, Inc., Silver Spring, Maryland  
Office Of Education (DHEW), Washington, D.C.  
EDRS mf, hc  
OEG-32-30-7315-5024 P-111  
BR-1-0402

Descriptors: exceptional child research; behavior change; handicapped children; parent participation; operant conditioning; behavior problems; family problems; parent counseling; parent role; reinforcement; group discussion; sensitivity training; individual counseling;

video tape recordings; parent child relationship; program evaluation; rewards; home visits; case studies (education)

A program to teach behavioral analysis principles and applications to parents and other caretakers of disturbing children (normal, retarded, neurotic, psychotic, and others) was developed while serving 50 families. A nine-family study was then done comparing three 12-week treatments (minimum contact 1, nonoperant 1, and operant 1) in terms of therapeutic process and outcome. A second 12-week treatment period 3 weeks after the first was designed, in part, to offer operant 2 to the six families who had not received operant in treatment period 1. Three measurement periods occurred: one before treatment 1, one after treatment 1, and another after treatment 2. Process data were collected during all treatment periods; and outcome data, based on objective ratings of videotapes of parent-child interactions and parents' psychological test performances were collected during all measurement periods. Children in all groups improved in general behavior categories and in specific-to-each-family categories. Operant groups seemed better but there were not enough cases for statistical significance. The psychological tests of the six operant-only parent pairs improved more than did the three nonoperant-then-operant parent pairs. Recommendations for further research and applications are presented. (Author/JD)

#### ABSTRACT 11589

EC 01 1589 ED N.A.  
Publ. Date 66 256p.  
Inglis, James  
**The Scientific Study of Abnormal Behavior: Experimental and Clinical Research.**  
EDRS not available  
ALDINE Publishing Company, 320 West Adams Street, Chicago, Illinois 60606 (\$8.95).

Descriptors: exceptional child research; emotionally disturbed; behavior; learning characteristics; cognitive processes; behavior change; conditioned response; operant conditioning; discrimination learning; sensory deprivation; memory; reinforcement; thought processes; psychotherapy; clinical diagnosis; neurology; schizophrenia

Applications of the scientific principles of psychology to the field of abnormality are discussed as exemplified by selected studies involving the measurement and the manipulation of disordered behavior. Essential differences between the clinical and experimental approaches to psychopathology and their interdependence are presented; investigation techniques, procedures, and findings are considered. The observation and description of abnormality deal with the study of thought and memory disorders. Experiment and the alteration of abnormality include the effects of neurosurgery, sensory deprivation, reinforcement, reinforcement of verbal behavior, and psychotherapy, and a single case. (1 E)

#### ABSTRACT 11709

EC 01 1709 ED N.A.  
Publ. Date Feb 67 14p.  
Schell, Robert E. And Others  
**Development of Language Behavior in an Autistic Child.**  
EDRS not available  
Journal Of Speech And Hearing Disorders; V32 N1 P51-64 Feb 1967

Descriptors: exceptional child research; emotionally disturbed; autism; speech therapy; behavior change; reinforcement; visual discrimination; auditory discrimination; attention control; verbal development

The treatment program for a nonverbal autistic 4 1/2-year-old boy was based on operant conditioning principles, with candy as a primary reinforcer. Goals were to increase the variety and frequency of the subject's behavior, to bring his behavior under stimulus control, and to establish people as sources of discriminative and reinforcing stimuli. The subject received 75-minute sessions three times a week; the program included sorting and auditory discrimination tasks, prompting and shaping of verbal behavior through game activities and eliciting nonverbal behavior and its verbal control by others. After 45 sessions, the subject displayed curiosity, giggled appropriately, responded to his name, and reacted to the clinician and to other persons. (MK)

#### ABSTRACT 11726

EC 01 1726 ED N.A.  
Publ. Date Nov 67 7p.  
Hamilton, John W.; Stephens, Lynn Y.  
**Reinstating Speech in an Emotionally Disturbed, Mentally Retarded Young Woman.**  
EDRS not available  
Journal Of Speech And Hearing Disorders; V32 N4 P383-9 Nov 1967

Descriptors: exceptional child research; emotionally disturbed; mentally handicapped; reinforcement; speech therapy; behavior problems; educable mentally handicapped; institutionalized (persons); institutional personnel; operant conditioning; conditioned response; rewards; stimulus generalization; speech improvement; behavior change

A 19-year-old mentally retarded, emotionally disturbed, institutionalized woman was treated by operant conditioning procedures to try to develop speech behavior. Her behavior then included floor-rolling, screaming episodes, muteness, and social isolation. The behavior problems of floor-rolling and screaming were brought under control prior to speech training by confining the subject to a time-out area, a chair bolted to the floor and shielded from the ward following floor-rolling incidents. After 14 days the floor-rolling rarely occurred; screaming behavior diminished rapidly. The program used to elicit speech had four distinct phases: response to picture cards, imitating sentences spoken by instructor, making audible requests in the ward, and additional verbal social responses in the ward. Speech behavior



was reinforced by fulfilling only those requests which were made verbally. In addition to rapid development of speech behavior on the ward, the patient made substantial gains in general social behavior. The authors feel the apparent ease of progress made in this case was due to the systematic method of approach and cooperation of ward personnel. (GD)

#### ABSTRACT 11767

EC 01 1767 ED N.A.  
Publ. Date Aug 67 7p.  
Allen, K. Eileen And Others  
**Control of Hyperactivity by Social Reinforcement of Attending Behavior.**  
EDRS not available  
Journal Of Educational Psychology; V58 N4 P231-7 Aug 1967

Descriptors: exceptional child research; preschool children; attention span; operant conditioning; reinforcement; behavior change; teacher role; social influences; hyperactivity; case studies (education)

The attending behavior of a 4 1/2-year-old boy was increased by systematic social reinforcement by his preschool teachers. Teachers gave the subject attention when he stayed with one activity for a minute. The average duration of activities increased from 53 seconds to 1 minute 51 seconds with teacher reinforcement. Without teacher reinforcement duration dropped to 59 seconds per activity. Reinforcements were again applied and duration reached 2 1/2 minutes per activity. When the reinforcement criterion was then raised to 2 minutes, the average duration leveled off to 1 minute 34 seconds per activity. Social behavior did not change. Conclusions were that attending behavior can be shaped and maintained by teachers using social reinforcement. (LE)

#### ABSTRACT 11994

EC 01 1994 ED 031 026  
Publ. Date Dec 67 97p.  
Hewitt, Frank M. And Others  
**The Santa Monica Project: Demonstration and Evaluation of an Engineered Classroom Design for Emotionally Disturbed Children in the Public School, Phase I-Elementary Level.**  
California University, Los Angeles, Graduate School Of Education;  
Santa Monica Unified School District, California  
Office Of Education (DHEW), Washington, D. C.; Bureau Of Research  
EDRS mf,hs  
OEG-4-7-062893-0377  
BR-6-2893

Descriptors: exceptional child research; emotionally disturbed; behavior change; attention span; academic achievement; reinforcement; student evaluation; arithmetic; testing; teaching methods; program evaluation; rewards; behavior rating scales; class size; teacher aides; classroom design; scheduling; reading instruction; teacher role

To evaluate the effectiveness of an engineered classroom design, 54 education-

ally handicapped children were placed in six classrooms, each with a teacher and an aide. Each classroom was set up with three major centers: mastery-achievement, exploratory-social, and attention-response-order. Children were assigned tasks at centers in keeping with their individual problems and were awarded check marks every 15 minutes for behavior and work according to behavior modification principles. Achievement was tested three times over the year; daily task attention was recorded by two observers who clocked the number of seconds each child's eyes were on an assigned task during 5-minute samples taken five times daily. Children in the experimental classroom utilizing the engineered design enjoyed a 5 to 20% task attention advantage over children in the control classrooms not using the check mark system and all aspects of the design. Experimental classes which abruptly withdrew the design at mid-year showed no decrease in task attention, in fact they improved. While reading and spelling gains were not significantly different between experimental and control conditions, gains in arithmetic fundamentals were significantly correlated with the presence of the engineered design. (Author/RJ)

#### ABSTRACT 12021

EC 01 2011 ED N.A.  
Publ. Date Jun 67 4p.  
Bernard, J. L.; Eisenman, Russell  
**Verbal Conditioning In Sociopaths with Social Monetary Reinforcement.**  
EDRS not available  
Journal Of Personality And Social Psychology; V6 N2 P203-6 Jun 1967

Descriptors: exceptional child research; delinquency; socially deviant behavior; reinforcement; verbal operant conditioning; behavior change; operant conditioning

A group of 40 female prisoners with Minnesota Multiphasic Personality Inventory (MMPI) profiles of sociopathic but not psychotic tendencies and a control group of 39 student nurses without MMPI psychotic or sociopathic profiles were administered a verbal conditioning task under conditions of social and monetary reinforcers. Sociopaths conditioned better than normals for either social or monetary reinforcement ( $p$  less than .01); social reinforcement was more effective than monetary rewards for both groups but more so for the sociopaths. Explanations for the significant superiority of praise over the nickels ( $p$  less than .01) were that it may have been due to the fact that the praise came from male experimenters and that the subjects were not instructed that they could keep the nickels. (JM)

#### ABSTRACT 12078

EC 01 2078 ED N.A.  
Publ. Date 65 329p.  
Bandura, Albert; Walters, Richard H.  
**Social Learning and Personality Development.**  
EDRS not available

Holt, Rinehart And Winston, Inc., 383 Madison Avenue, New York, New York 10017.

Descriptors: exceptional child education; behavior; learning; reinforcement; operant conditioning; imitation; behavior change; self control; stimulus response; behavioral sciences; behavior theories; research reviews (publications); learning theories; behavioral science research; aggression; socially deviant behavior; social development; sex differences; discipline; identification (psychological); social influences; socialization

Social-learning principles are presented which emphasize social variables and synthesize psychological, clinical, psychiatric, and sociological and anthropological research. Both normal and deviant behavior are explained by a single set of social-learning principles. First the existing learning theories are modified to account for the development and modification of social behavior. Principles discussed are the role of imitation, and the effects on social behavior of various types of reinforcement patterns. Then these principles are applied to the problem of developing and maintaining of self control. Behavior modification is described in terms of the methods of producing change as well as theoretical issues. (IM)

#### ABSTRACT 12092

EC 01 2092 ED N.A.  
Publ. Date Jul 69 6p.  
Mulhern, Thomas; Baumeister, Alfred A.  
**An Experimental Attempt to Reduce Stereotypy by Reinforcement Procedures.**

EDRS not available  
American Journal Of Mental Deficiency; V74 N1 P69-74 Jul 1969

Descriptors: exceptional child research; mentally handicapped; behavior change; reinforcement; custodial mentally handicapped; operant conditioning; behavior patterns

Stereotyped behavior is defined as a constant repetition of responses that have no apparent adaptive consequences for the organism. The research reported here attempted to reduce this behavior in two severely retarded, brain-damaged subjects. Two experiments were conducted in which reinforcement was made contingent upon sitting still. Discriminative stimuli were provided to inform the subjects that no reinforcement would be forthcoming while they engaged in stereotyped behavior. The overall effect of these treatments was a reliable reduction in the rate of activity for each subject. (Author)

#### ABSTRACT 12094

EC 01 2094 ED N.A.  
Publ. Date Jul 69 18p.  
Gardner, William I.  
**Use of Punishment Procedures with the Severely Retarded: A Review.**  
EDRS not available  
American Journal Of Mental Deficiency; V74 N1 P85-103 Jul 1969

Descriptors: exceptional child research; mentally handicapped; reinforcement; custodial mentally handicapped; negative reinforcement; research reviews (publications); behavior change; behavior problems; electrical stimuli

Behavior treatment procedures involving aversive consequences have been used with increased frequency in work with the severely and profoundly retarded. Review of these punishment studies suggests a cautious conclusion that such procedures may produce desirable behavior change. In addition, there is some evidence that side effects of negative emotional states and disruption of social relationships are not necessary results of punishment techniques. (Author)

#### ABSTRACT 20029

EC 02 0029 ED 019 802  
 Publ. Date Dec 67 45p.  
 Prince, Albert I.  
**Conditioning Children for School. Final Report.**  
 Evansville University, Indiana  
 EDRS mf.hc  
 OEG 3-7-06812-2053  
 DR-PROJ-6-8612-24

Descriptors: exceptional child research; learning; teaching methods; reinforcement; behavior problems; learning difficulties; low achievers achievement gains; academic achievement; reading; mathematics; spelling; behavior change; behavior patterns; operant conditioning; academic performance

A set of behavioral principles used in the intellectual rehabilitation of a small group of third graders with educational and related behavioral problems was evaluated. Subjects selected were eight third-grade students aged 8 to 10, who were 1 year behind in reading and 1 year behind in either spelling or mathematics. Their vision and hearing were essentially normal. Subjects participated for 8 weeks in both experimental and control conditions by working in matched pairs in either condition in one or two areas. At first, reinforcement was kept in view, given immediately, and used to differentiate the experimenter from other adults with whom the students had had unfortunate experiences. Correction and explanation were given. The materials were programed on match-to-sample slides, and the children responded by pushing the appropriate button. In the 5th, 6th, or 7th week, the rewards were changed from monetary to social ones. The reward schedule and speed of presentation were also manipulated. Material was kept (especially in the initial stages) at a level neither too difficult nor too easy. In the mathematics program, students were given both a difficult and mixed-difficulty series. Reading and spelling training were with 2,021 words from Thorndike Word List. Mathematics training, because of the unexpectedly fast learning rate, was changed from 2,000 to 4,000 problems. Of three somatic measures taken throughout training, only temperature

was observed to have an effect upon performance. Results indicated that experimental students generally improved more than did the controls. Grade changes were noted in all areas (best in spelling) for the experimental subjects, and teacher ratings were higher for them. Learning did not appear to be markedly affected by changes in type or schedule of reinforcement. Posttests after 4 months revealed retention best in mathematics. Appendixes contain the pretraining mathematics sequence, a list of words with semantic association index, and a sample of programed spelling words. (JD)

#### ABSTRACT 20046

EC 02 0046 ED 027 663  
 Publ. Date 67 101p.  
 Cohen, Harold L. And Others  
**Case I: An Initial Study of Contingencies Applicable to Special Education.**  
 Institute For Behavioral Research, Inc., Silver Spring, Maryland  
 Office Of Juvenile Delinquency And Youth Development (DHEW), Washington, D. C.  
 Federal Bureau Of Prisons, Washington, D. C.  
 EDRS not available  
 RD-65017; RD-66001  
 Institute For Behavioral Research, Inc., 2426 Linden Lane, Silver Spring, Maryland 20910.

Descriptors: exceptional child research; delinquency; behavior; reinforcement; building design; space utilization; classroom arrangement; offices (facilities); leisure time; recreational facilities; individualized instruction; adolescents; prisoners; rewards; behavior change; student attitudes; academic achievement; testing; inservice education; professional education; administration

Sixteen inmates of the National Training School for boys who had a poor school history were involved in an educational program which utilized a specially created environment and reinforcement. Students participated in regular classes or worked on individual programed materials to earn points which could be spent in a variety of ways. A cottage basement was converted to provide administrative offices, testing rooms, a student study area, student offices, a store, a library, and a lounge. A score of 90% on an individual program or on pre- or posttests earned the student a point equal to one cent. Admission was charged to the lounge and library, for recreational material, for food, clothing, books, magazines, or other material, for renting student offices, and for entrance into courses. Increased academic achievement, amount of time spent in educational pursuits and in leisure time activities, and individual improvement of selected students are shown in figures and tables. Office rental, course registration, staff reports, objective measurement, and observations of student attitudes and behavior are also presented to support the conclusion of program effectiveness. Program success, an increase in educational be-

haviors, and improved attitudes led to the establishment of a second, lengthier project. (RP)

#### ABSTRACT 20188

EC 02 0188 ED 031 856  
 Publ. Date Apr 68 50p.  
**Behavior Disorders.**  
 Council For Exceptional Children, Washington, D. C.  
 EDRS mf  
 From CEC Selected Convention Papers From The Annual International Convention (46th, New York City, April 14-20, 1968).

Descriptors: exceptional child research; emotionally disturbed; conference reports; delinquency; behavior change; reinforcement; counseling; preschool programs; self concept; aggression; abstracts

Selected papers on behavioral disorders include the following: aggression as an indicator for rehabilitative efforts by Herbert Grossman; the evaluation of differential low rate conditioning procedures on destructive behavior by Christine Walken; a modification for non-directive therapy by Robert V. Turner; Pinet, Skinner and a comprehensive preschool program for lower class children and their mothers by Norma Radin; techniques for behavior management by Roger Kroth; problems in self-concept research by Lee Joiner, Edsel Erikson and Richard Towne; and psychodynamic management procedures by Henry Fisher. Abstracts of articles treat these subjects: educational problems and issues for the juvenile offender by Garland Wollard; special education for addicted students by Herbert Rusalem; research on characteristics of teachers by John Mesinger; a report of desensitization and tutoring therapy by Daryll Bauer. This unit of reports is available in microfiche. (WW)

#### ABSTRACT 20256

EC 02 0256 ED N.A.  
 Publ. Date May 67 6p.  
 O'Leary, K. Daniel; Becker, Wesley C.  
**Behavior Modification of an Adjustment Class; A Token Reinforcement Program.**  
 EDRS not available  
 Exceptional Children; V33 N9 P637-42  
 May 1967

Descriptors: exceptional child research; emotionally disturbed; reinforcement; behavior; behavior change; observations; socially deviant behavior; positive reinforcement; reinforcers; operant conditioning; class management

A token reinforcement program was employed in an attempt to modify behavior in a third grade adjustment class for the emotionally disturbed. There were 17 subjects, from 80 to 107 IQ, and 9 years of age. Of the 17, the study focused on the eight most disruptive. Behaviors classified as deviant included pushing, answering without raising one's hand, chewing gum, eating, name calling, making disruptive noise, and talking. During the token reinforcement



period, children were told that they would receive ratings from one to 10 reflecting the extent to which they followed instructions given. The ratings were exchanged for a variety of backup reinforcers, such as candy and small prizes. By the end of the school year a 4-day delay between token and reinforcer was used, and the average percentage of deviant behavior was considerably lower. The daily mean of deviant behavior during the token procedure ranged from 3 to 32% whereas during the base period it had ranged from 66 to 91%. The average of deviant behavior for all children dropped from 76% in the base period to 10% with the token procedure. (JD)

#### ABSTRACT 20383

EC 02 0383 ED N.A.  
Publ. Date Oct 69 8p.  
Brown, Richard A. And Others  
**Treatment of Extreme Negativism and Autistic Behavior in a 6 Year Old Boy.**  
EDRS not available  
Exceptional Children; V36 N2 P115-22 Oct 1969

Descriptors: exceptional child research; emotionally disturbed; behavior change; autism; reinforcement; case studies (education); parent participation

A 6-year old boy with negativistic and autistic behavior was observed to have 100% noncompliance with requests. The therapist then enforced demands for physical action as calmly and detachedly as possible. Eventually a reinforcement system was introduced. His negativism and tantrums declined while relevant behaviors increased. At school he had previously earned less than 500 points a week on a reinforcement system; after individual training he increased to 2,500. His parents learned reinforcement techniques and reported improved behavior. (RJ)

#### ABSTRACT 20446

EC 02 0446 ED N.A.  
Publ. Date 69 16p.  
Mattos, Robert L. And Others  
**Reinforcement and Aversive Control in the Modification of Behavior.**  
EDRS not available  
Academic Therapy Quarterly; V5 N1 P37-52 Fall 1969

Descriptors: exceptional child research; socially deviant behavior; behavior change; reinforcement; socially maladjusted; classroom observation techniques; regular class placement; transfer of training

To develop and test methods to meet the needs of behaviorally disturbed children in the regular class, two groups of socially deviant males (grades 4, 5, and 6) attended an experimental class for one half day and a regular class for one half day. The classroom functioned on a token system; points were given for appropriate academic and social behavior and could be traded for free time (Group 1) or tangible reinforcers (Group 2). Time out was used in cases of

disruptive behavior. Various response-reinforcement contingencies were employed. The amount of task oriented behavior increased appreciably for all students; when aversive controls were removed, however, inappropriate behavior abruptly increased. Indications were that a combination of reinforcing and aversive procedures was more efficient in modifying deviant behavior than was either one alone. (RJ)

#### ABSTRACT 20478

EC 02 0478 ED N.A.  
Publ. Date 69 66p.  
Valette, Robert E.  
**Modifying Children's Behavior: A Guide for Parents and Professionals.**  
EDRS not available  
Fearon Publishers, 2165 Park Boulevard, Palo Alto, California 94306.

Descriptors: exceptional child education; behavior; child development; reinforcement; child rearing; parent counseling; behavioral counseling; parent child relationship; environmental influences; adjustment (to environment); behavior change; parent education; parent role

Designed to aid parents in helping their handicapped children, the text presents information on behavior and behavior modification. Nine major areas of parental concern are divided into 28 lessons and 158 problems for use in self-instruction, parent counseling, parent education, or teacher inservice training. The areas included are how behavior develops, parental needs and demands, establishing behavioral objectives, how parents can teach desirable behavior, how undesirable behavior is learned, getting ready to change behavior, systems for reinforcing desirable behavior, managing behavior problems, and the happy family. Appendixes list 13 books and 12 audiovisual materials, and present four forms for parent use. (LE)

#### ABSTRACT 20548

EC 02 0548 ED N.A.  
Publ. Date 66 865p.  
Honig, Werner K., Ed.  
**Operant Behavior: Areas of Research and Application. The Century Psychological Series.**  
EDRS not available  
Appleton-Century-Crofts, 410 Park Avenue South, New York, New York 10016 (\$13.00).

Descriptors: exceptional child research; behavior; reinforcement; behavioral science research; operant conditioning; stimulus behavior; research projects; motivation; child development; aerospace technology; programming; environmental influences; arithmetic; medical treatment; sensory experience; verbal communication; negative reinforcement; positive reinforcement; behavior change; drug therapy

The use of operant methodology in psychological research is examined in this volume. Each chapter considers an area of thought and experimentation, describes the methods employed, surveys the major findings, and points out

the implications of the data for empirical and theoretical problems. In the introduction, the characteristics of operant methods and of data and concepts based on operant behavior are outlined. Subsequent chapters discuss operant behavior, superstition (defined as a corollary of operant conditioning principles), intermittent and sensory reinforcement, and chaining with conditioned reinforcement. The following are also considered: concurrent operants, stimulus control, animal sensory processes, punishment, avoidance behavior, discrimination avoidance, the study of drugs, the assessment and control of motivational states, the experimental production of altered physiological states, space technology, child behavior and development, conditioning human verbal behavior, and the idea of programed environments for the experimental analysis of human behavior. A reference list appears with each chapter. Illustrations, charts, a name index, and a topical index are included. (JD)

#### ABSTRACT 20647

EC 02 0647 ED N.A.  
Publ. Date Jun 66 10p  
Quay, Herbert C.  
**Dimensions of Problem Behavior in Children and Their Interaction in the Approaches to Behavior Modifications.**  
Illinois University, Urbana, Children's Research Center  
National Institutes Of Health (DHEW), Bethesda, Maryland  
EDRS not available  
NB-07346-01  
Kansas Studies In Education; V15 N2 P6-15 Jun 1966

Descriptors: exceptional child education; behavior; emotionally disturbed; delinquency; personality; neurotic children; psychosis; delinquent behavior; antisocial behavior; behavior problems; conceptual schemes; behavior theories; teaching methods; reinforcement; behavior change

The classification of behavioral disorders is discussed; extreme behavior on one or more dimensions is suggested as characterizing the disturbed child. Necessary attributes of a classification system listed are objectivity, independence, obtainability from one or more than one kind of data, relationship to meaningful external criteria, and a basis in the statistically demonstrable covariance of the specific behavior traits which are said to form the dimension. The four orthogonal factorial dimensions described as accounting for most of the variance of the many behavior traits are the conduct disorder or unsocialized aggressive or psychopathic factors, the personality disorder or overinhibited or neurotic disturbed, the socialized or subcultural delinquent, and the inadequate or immature child. Implications of the conceptual scheme for behavioral modification and academic learning are suggested from research studies and theoretical speculation. A 23-item bibliography and a discussion follow the paper. (JW)

**ABSTRACT 20657**

EC 02 0657 ED N.A.  
 Publ. Date Aug 67 26p.  
 L'Abate, Luciano; Whitaker, Daniel I.  
**An Annotated Bibliography of Behavior Modification with Children and Retardates.**  
 Georgia State College, Atlanta, Child Development Laboratory  
 EDRS not available  
 Dr. Luciano L'Abate, Department Of Psychology, Georgia State College, 33 Gilmore Street, S. E., Atlanta, Georgia 30303.

Descriptors: exceptional child research; mentally handicapped; behavior; learning; reinforcement; annotated bibliographies; behavioral science research; behavior change; operant conditioning

One hundred thirty items on behavior modification, mostly journal articles or books published in the 1960's, are listed. Each is briefly summarized. (LE)

**ABSTRACT 20672**

EC 02 0672 ED N.A.  
 Publ. Date Jan 66 9p.  
 Whelan, Richard F.; Haring, Norris G.  
**Modification and Maintenance of Behavior through Systematic Application of Consequences.**  
 EDRS not available  
 Exceptional Children; V32 N5 P281-9 Jan 1966

Descriptors: exceptional child research; emotionally disturbed; reinforcement; teaching methods; behavior change; behavioral science research; teacher behavior; behavior development; educational innovation; research reviews (publications); learning theories; positive reinforcement; reinforcers

Behavioral modification techniques which have been practically and efficiently applied with individuals and groups of children are reviewed. Research studies which demonstrate the use of these techniques and which may have implications for the classroom teacher are cited. The educational challenge of applying the research to regular and special class situations is developed with the disadvantages and dangers inherent in random, inconsistent application of the principles cited. (WW)

**ABSTRACT 20698**

EC 02 0698 ED N.A.  
 Publ. Date Jan 70 9p.  
 Broden, Marcia And Others  
**Effects of Teacher Attention and a Token Reinforcement System in a Junior High School Special Education Class.**  
 EDRS not available  
 Exceptional Children; V36 N5 P341-9 Jan 1970

Descriptors: exceptional child research; reinforcement; behavior change; behavior problems; junior high school students; teacher role

Teacher attention and a token reinforcement system were used to bring about control in a disruptive junior high school special education classroom. In-

dividual and group study levels were recorded during a baseline period. Subsequent experimental periods employing teacher attention and/or a token point system increased study levels and decreased disruptive behaviors of class members. Reinforcement of appropriate behaviors was withdrawn during short reversals producing lowered study rates. Reinstatement of contingencies again resulted in increased study levels. (Author)

**ABSTRACT 20778**

EC 02 0778 ED N.A.  
 Publ. Date Jan 70 8p.  
 Rice, Ruth Dianne  
**Educo-Therapy: A New Approach to Delinquent Behavior.**  
 EDRS not available  
 J Learning Disabilities; V3 N1 P16-23 Jan 1970

Descriptors: exceptional child research; delinquency; educational therapy; learning disabilities; behavior change; remedial programs; self concept; social development; behavior problems; reinforcement

Ten delinquent girls who were appraised by a group of several educators as having learning disabilities and/or behavior disturbances participated in an intensive intervention program for 3 months. The treatment included three phases or progressive levels: behavioral modifications through conditioning and reinforcement (primarily through the use of oral and emotional gratification); remedial education procedures; and improvement of self concept and social integration through an enriched cultural-social-personal improvement program. Results showed improvement in the language and reading performance of nine subjects on a posttest of the Gates Reading Survey (gains ranged from 2 months to 13 months in grade level). Full scale scores on the posttest of the WISC were raised from one to 17 points. Improvements in personal appearance, social interaction, attitudes toward authority, and hostile behavior were noted and described in staff reports. (RD)

**ABSTRACT 20854**

EC 02 0854 ED 028 561  
 Publ. Date 68 146p.  
 Larsen, Lawrence A.; Bricker, William A.  
**A Manual for Parents and Teachers of Severely and Moderately Retarded Children. IMRID Papers and Reports, Volume 5, Number 22.**  
 Institute On Mental Retardation And Intellectual Development, Nashville, Tennessee  
 EDRS mf,fc  
 IMRID, Box 163, George Peabody College, Nashville, Tennessee 37203 (\$0.50).

Descriptors: exceptional child education; mentally handicapped; behavior change; teaching methods; self care skills; instructional materials; learning; operant conditioning; reinforcement; pretesting; post testing; behavior rating

sc test; rewards; positive reinforcement; negative reinforcement; self reward; verbal operant conditioning; task analysis; visually handicapped; aurally handicapped; custodial mentally handicapped; trainable mentally handicapped

Designed for both parents and teachers, the handbook presents methods for educating the moderately and severely retarded child. Those methods include measuring progress, rewarding and punishing, ways of using rewards and punishers, ways of giving positive reinforcers and punishers, withholding reinforcers (extinction), letting the child reward himself, spacing giving reinforcers, shaping behavior in small steps, using signals, and building control. Twenty-three activities are next presented, each with a task definition, pretest, and suggested education program. These activities include sitting quietly; building puzzles; coloring; playing with toys, balls, and wagons; toilet training; eating correctly; putting on a pullover shirt, pants, and socks; buttoning buttons; tying shoe laces; brushing teeth; washing; imitating movements, mouth movements, sounds, and words; understanding words and the names of colors; naming objects, actions, and colors; and talking in sentences. Appendixes include materials needed for the activities, suggested reinforcers, sample forms for pre- and post-test, glossary, and applications to blind and deaf children. (LE)

**ABSTRACT 20930**

EC 02 0930 ED 032 661  
 Publ. Date 67 239p.  
 Hill, John P., Ed.  
**Minnesota Symposia on Child Psychology. Volume 1.**  
 Minnesota University, Minneapolis. Institute Of Child Development  
 EDRS not available  
 The University Of Minnesota Press, 2037 University Avenue, S. E., Minneapolis, Minnesota 55414 (\$5.00).

Descriptors: exceptional child research; emotionally disturbed; reinforcement; behavior change; schizophrenia; autism; negative reinforcement; behavior problems; withdrawal tendencies; psychology; operant conditioning; social reinforcement; language development; imitation; stimulus generalization

Ten Schizophrenic and Autistic Children who exhibit self destructive, tantrum, echolalic, and self stimulatory behaviors were treated by reinforcement therapy. Reinforcement withdrawal, in the form of interpersonal isolation contingent upon self-destruction, and electrical shocks served to extinguish these behaviors in some children. Reinforcement withdrawal contingent upon echolalic behavior, and reinforcement delivery, contingent upon appropriate speech, were found to decrease echolalic speech. Observations led to the conclusion that as an appropriate behavior was strengthened by reinforcement, self-stimulatory behavior decreased in strength. Children learned to seek contact with adults through shock avoidance training. Establishment of speech

in previously mute children was accomplished through verbal imitation training; imitation was also used to facilitate the acquisition of complex social and preschool behaviors. Because of the problem of generalization to life outside the hospital, parents were taught to employ the training procedures in the child's day-to-day environment. (LE)

#### ABSTRACT 21147

EC 02 1147 ED N.A.  
 Publ. Date Jan 70 10p.  
 Larsen, Lawrence A.  
**Behavior Modification with the Multi-Handicapped.**  
 JDRS not available  
 New Outlook For The Blind; V64 N1  
 P6-15 Jan 1970

Descriptors: exceptional child education; multiply handicapped; behavior change; teacher behavior; reinforcement; reinforcers; teaching methods; sequential approach

The article discusses behavior modification in light of teacher behavior and reinforcers as affecting student behavior. The teacher behaviors and hopeful reactions to them which are noted are an increased rate of giving positive reinforcers depending upon appropriate behavior and decreasing for negative behavior, measuring behavior before, during, and after instructional program, individual altering of programs depending on behavior, and an ordering of complex behaviors in hierarchical complexity and teaching the least complex behavior first. Additional areas covered are separating complex behaviors into component parts and teaching each part separately, working with behaviors that match the environment to the child, and measuring, adjusting, and reworking programs. Also considered are methods of assessing and remediating expressive and receptive deficits. (JM)

#### ABSTRACT 21192

EC 02 1192 ED 026 683  
 Publ. Date Dec 68 72p.  
 Patterson, Gerald R. And Others  
**Direct Intervention In Families of Deviant Children.**  
 Oregon Research Institute, Eugene;  
 Oregon University, Eugene  
 EDRS mf,hc

Descriptors: exceptional child research; behavior change; behavior development; behavior problems; change agents; intervention; psychoeducational processes; reinforcement; social environment; social influences; socially deviant behavior; teaching methods; emotionally disturbed

It is assumed here that the most effective way of reducing the rate of deviant child behavior is to alter the reinforcing contingencies supplied by the social agents who live with the child. The immediate focus for the intervention program is upon the social environment in which the child lives, because it is the parents, siblings, peers, and teacher who provide the reinforcers which maintain these behaviors. Data are presented in this

report from observations made for six children demonstrating the effect of direct intervention in the home and in the school. The sample consisted of boys aged 4 to 12 with multiple problems of the kind typically referred for outpatient treatment. Observations made during baseline, intervention, and follow-up underline the feasibility of training parents, siblings, peers, and teachers to alter the behavior of the identified deviant child. (BP)

#### ABSTRACT 21205

EC 02 1205 ED 026 694  
 Publ. Date (68) 69p.  
 Walker, Hill M. And Others  
**Special Class Placement as a Treatment Alternative for Deviant Behavior in Children. Section One. Interim Report.**  
 Oregon University, Eugene  
 Office Of Education (DHEW), Washington, D. C., Bureau Of Research  
 EDRS mf,hc  
 OEG-4-6-061308-0571  
 BR-6-1308

Descriptors: exceptional child research; emotionally disturbed; anti social behavior; behavior change; behavior development; behavior problems; change agents; classroom environment; elementary school students; habit formation; milieu therapy; motivation; reinforcement; socially deviant behavior; social reinforcement

The efficiency of behavior modification technology, as a therapeutic intervention process, has been amply demonstrated. The establishment of special educational settings for modification of deviant behavior, as reported here, provides opportunity for a controlled analysis of the effects of groups of experimental variables, where treatment in regular classrooms is less amenable to the analysis of cause and effect relationships. This paper described the development and evaluation of a treatment model designed for our class of deviant behavior: hyperactive, disruptive, acting out behavior in the classroom. Some 12 males, in grades 4, 5, and 6, average or above in intellectual ability, were the subjects. Socially acceptable behavior was reinforced by the accumulation of individual and group points exchangeable for free time for high valence activities. A variety of timing and recording devices were used to monitor behavior and points. Observations were made of subjects' behavior in special and regular classrooms. The treatment model proved very effective. Of three components, token reinforcement, social reinforcement, and aversive controls, social reinforcement exercised the greatest control. (BP)

#### ABSTRACT 21207

EC 02 1207 ED N.A.  
 Publ. Date Jan 70 12p.  
 Leventhal, Howard; Fischer, Kurt  
**What Reinforces in a Social Reinforcement Situation--Words or Expressions?**  
 EDRS not available  
 Journal Of Personality And Social Psychology; V14 N1 P83-94 Jan 1970

Descriptors: reinforcement; social reinforcement; behavior change; methods research; behavioral science research; research methodology; researchers; task performance; interpersonal relationship

An experiment was designed to evaluate the role of expressive communication in a social reinforcement setting. Changes in preference and changes in response rate were compared for three conditions: verbal reinforcement, experimenter present but silent, and the experimenter removed from the immediate situation. Increases in rate of responding are greatest in the reinforcement conditions, but the increases occur before reinforcement is initiated. Rate increases seem to be a consequence of changes in the subject's emotional state, which in turn are related to the experimenter's treatment of the child. Preference shifts occur regardless of reinforcement as long as the experimenter remains in the situation. The experimenter's expressive behavior appears to cause such shifts. A sociable or friendly manner combined with a strong task orientation has the strongest influence on the subject's responding. Although expressive communication plays an important role in changing task behavior, its effectiveness may depend, however, upon subject and experimenter sharing particular conceptions of the teacher's and learner's role in the task. (APA)

#### ABSTRACT 21317

EC 02 1317 ED 026 684  
 Publ. Date Sep 68 9p.  
 Mattson, Robert H. And Others  
**Assessment and Treatment of Deviant Behavior. Interim Report.**  
 Oregon University, Eugene  
 Office Of Education (DHEW), Washington, D. C., Bureau Of Research  
 EDRS mf,hc  
 OEG-4-6-061308-0571  
 BR-6-1308

Descriptors: behavior change; behavior problems; change agents; educational research; learning theories; psychoeducational processes; teacher role; transfer of training; teaching methods

This interim report presents an introduction to a research study designed to develop educational procedures for modifying deviant behavior in children. A five-component treatment model was developed and research designed to evaluate the weights of each variable in the treatment process. Studies were designed to define strategies that would facilitate the generalization and persistence of treatment across time and setting, to study the teacher as a variable and to evaluate strategies to control behavior in regular classrooms. These three studies are summarized: Stimulus Generalization, interding to maximize generalization and maintenance of modified behaviors, Efficient Social Engineering, to increase efficiency of learning theory applications in applied settings, and The Teacher as a Behavioral Engineer, to modify teacher behavior to strengthen reprogramming efforts in applied settings. (BP)

**ABSTRACT 21388**

EC 02 1388 ED N.A.  
 Publ. Date Apr 69 6p.  
 Stark, Joel And Others  
**Modifying Maladaptive Behavior in a Non-Verbal Child.**  
 EDRS not available  
 British Journal Of Disorders Of Communication; V4 N1 P67-72 Apr 1969

Descriptors: exceptional child education; language handicapped; case studies (education); behavior change; imitation; verbal development; verbal stimuli; reinforcement; behavior problems; attention control

The process of changing maladaptive behavior in a nonverbal 3 year old child is described. The procedure began with establishing attending behavior using food and praise incentives, proceeded to teaching imitation, then to verbal commands, and eventually to a vocal repertoire. The prognosis is now favorable and social behavior is much improved. (JM)

**ABSTRACT 21491**

EC 02 1491 ED 034 369  
 Publ. Date Jun 69 348p.  
 Brill, Richard G. And Others  
**Pilot Program with Seriously Emotionally Disturbed Deaf Children. Final Report.**  
 California School For The Deaf, Riverside  
 Office Of Education (DHEW), Washington, D. C.; Bureau Of Research  
 EDRS mf,hc  
 OEG-4-7-062422-0208

Descriptors: exceptional child research; aurally handicapped; emotionally disturbed; case studies (education); behavior change; parent attitudes; reading achievement; arithmetic; parent counseling; program evaluation; reinforcement; student evaluation; clinical diagnosis; adjustment (to environment)

To modify behavior and teach basic skills and subject matter, 16 emotionally disturbed deaf boys were involved in a pilot project to enable them to return to regular classes. The program featured a small staff-pupil ratio, application of behavior modification techniques, engineered instruction, individualized self-instructional curriculum materials, coordinated classroom and dormitory activities, manual communication, and parent education. Results showed that changes in class conduct and self-control were significant; reading skills showed good improvement; significant gains were made in arithmetic; interpersonal rapport improved among the boys and also with adults; and parents were enthusiastic about changes in their children. One of the 16 boys is deceased, one returned to a psychiatric hospital and eight of the remaining 14 became successful participants in regular classes for the deaf. Extensive appendixes, tables, lists of figures pertaining to the project results, and case studies are included. (L)

**ABSTRACT 21761**

EC 02 1761 ED 035 140  
 Publ. Date 67 89p.  
 Hamblin, Robert L.; Buckholdt, David  
**Structured Exchanges and Childhood Learning: Hyperaggressive Children. Program Activity 12.**  
 Central Midwestern Regional Educational Laboratory, Inc., St. Ann, Missouri  
 Office Of Education (DHEW), Washington, D. C.  
 EDRS mf,hc

Descriptors: exceptional child research; emotionally disturbed; reinforcement; aggression; behavior change; rewards; motivation; social reinforcement; negative reinforcement; positive reinforcement; reinforcers; behavior theories; teaching methods; behavior problems; hyperactivity; habit formation; controlled environment; therapeutic environment; case studies (education); operant conditioning

Recognizing that punishment for aggression often is noneffective or inadvertently reinforces the aggressive act, the authors discuss an alternative approach and provide an explanation of the exchange theory of aggression. Three classroom experiments, operated with children chosen as the most severe behavior problems in a local school system, are reported. Teachers were initially allowed to teach as they usually would to provide baseline data. Observational reports showed chaotic classrooms with the teachers rewarding aggressive behavior. Token exchange systems were introduced according to the needs of the classroom. Anecdotal records and tables of data showed substantial reduction of hyperactive behavior and destructive acts with a resulting significant increase in attention level and class cooperation. Reversal of the conditions with the return to the baseline, no token exchange environment, showed a return to the original aggressive behavior, however, when the token exchange system for cooperation was reinstated, a significant decrease of aggressive acts resulting in a more productive learning environment was noted. Case studies detail the effects of the exchange system on two pupils and show the effect of restructuring the rewards in token exchange programs which were not immediately effective. (WW)

**ABSTRACT 21849**

EC 02 1849 ED N.A.  
 Publ. Date May 70 4p.  
 Stone, Martin C.  
**Behavior Shaping in a Classroom for Children with Cerebral Palsy.**  
 EDRS not available  
 Exceptional Children; V36 N9 P671-7 May 1970

Descriptors: exceptional child education; physically handicapped; behavior change; cerebral palsy; classroom environment; positive reinforcement; teaching methods; rewards; behavior problems

Seven boys diagnosed as cerebral palsied

with possible diffuse organic brain damage participated in a classroom behavior shaping technique consisting of reinforcing or rewarding correct or desired behavior and not rewarding (ignoring) inappropriate behavior. Descriptions of behavior patterns and specific techniques are provided. Results based on observations indicated overall improvement in behavior patterns of the class. (RD)

**ABSTRACT 21921**

EC 02 1921 ED N.A.  
 Publ. Date Mar 70 4p.  
 Gardner, James M. And Others  
**A Scale to Measure Skill in Applying Behavior Modification Techniques to the Mentally Retarded.**  
 EDRS not available  
 American Journal Of Mental Deficiency; V74 N5 P633-6 Mar 1970

Descriptors: exceptional child research; mentally handicapped; behavior change; attendant training; trainers; skill development; performance factors; staff role; rating scales

Proficiency in applying behavior modification techniques to the mentally retarded was measured by developing a 28 item 5-point rating scale. The scale was developed by breaking down behavior modification skills into their component parts and by constructing items corresponding to each of those components. The four major components identified were: reinforcing, shaping, communicating, and establishing rapport. Interscorer, split-half, and test-retest reliability were all high. Scores on the rating scale were found to correspond to global evaluations of training proficiency, and correlated highly with a test of principles of behavior modification. (Author)

**ABSTRACT 22042**

EC 02 2042 ED N.A.  
 Publ. Date 70 6p.  
 Stephens, Thomas M.  
**Psychological Consultation to Teachers of Learning and Behaviorally Handicapped Children Using a Behavioral Model.**  
 EDRS not available  
 Journal Of School Psychology; V8 N1 P13-8 Spr 1970  
 Paper Delivered At The Pennsylvania Psychological Association's Annual Meeting (Pocono Manor, Pennsylvania, June, 1969).

Descriptors: exceptional child education; behavioral objectives; models; reinforcement; student evaluation; teaching methods; evaluation methods; information retrieval

A behavioral model for assessing and teaching children who present learning and behavioral problems is presented. Two interlocking sections represent independent variables termed instructional strategies and dependent variables or observations of behavior. Reinforcement techniques are discussed as are methods of assessing behavior, reinforcement systems, and learning modalities. A computer retrieval system is suggested which



would provide an instructional strategy based on information concerning the student's present responses and the responses the teacher would like to elicit. (RJ)

# ABSTRACT 22043

EC 02 2043 ED 021 896  
Publ. Date May 66 18p.  
Quay, Herbert C.

## An Empirical-Experimental Approach to the Nature and Remediation of Conduct Disorders of Children.

Yeshiva University, New York, New York. Ferkauf Graduate School Of Humanities And Social Sciences  
EDRS mf

Yeshiva University, Ferkauf Graduate School, 55 Fifth Avenue, New York, New York 10003 (\$2.50).

Published In The Proceedings Of The Annual Invitational Conference On Urban Education, (5th, May 3, 1966).

Descriptors: exceptional child research; behavior problems; behavior patterns; classroom techniques; conditioned response; educational diagnosis; group instruction; psychological patterns; reinforcement; socially maladjusted

The conference paper stresses that children's behavior disorders can be modified in the classroom if they are considered as a constellation of specific behaviors rather than as deviant personality traits or disease entities. (To do so, however, the children must be approached within the framework of an empirically-based classification system. A behavior checklist filled out by teachers and parents can be used as a basic diagnostic tool to identify syndromes of problem behavior (conduct or personality disorders, or the disorders of the subcultural delinquent or the immature child). Classroom remediation methods should be based on the application of the principles of learning theory. The child should be taught to substitute acceptable alternatives for his inappropriate behaviors. To do so, it is necessary to experiment in the classroom with types of reinforcement, agents of reinforcement, and methods or presentation of reinforcement. Although most methods of behavioral remediation are designed for individual instruction, it is important for economic reasons to extend them to group situations. The goal of this remediation must be to help the child reenter the regular classroom cycle. Examples of empirical attempts to deal with specific problems in a special class setting are included. (DK)

# ABSTRACT 22095

EC 02 2095 ED 034 570  
Publ. Date Nov 69 20p.

## Reducing Behavior Problems: An Operant Conditioning Guide for Teachers.

ERIC Clearinghouse On Early Childhood Education, Urbana, Illinois; National Laboratory On Early Childhood Education, Urbana, Illinois

Office Of Economic Opportunity, Washington, D. C.

Office Of Education (DHEW), Washing-

ton, D. C.  
EDRS mf, hc

Descriptors: behavior change; behavior problems; classroom techniques; guides; negative reinforcement; operant conditioning; positive reinforcement; preschool children

Classroom management and what teachers can do to make it possible for children to behave better, which permits learning to occur, are the subjects of this handbook. The authors hypothesize that the first step toward better classroom management is a teacher's recognition that how children behave is largely determined by the teacher's behavior. When teachers employ operant conditioning they systematically use rewarding principles to strengthen children's suitable behavior. Ignoring unsuitable behavior will discourage its continuance. Behavior can be changed by the following three methods: reward appropriate behavior and withdraw rewards following inappropriate behavior; strengthen the rewards if the first method is unsuccessful; and punish inappropriate behavior while rewarding appropriate behavior if the other methods fail. The booklet explains each method and offers supporting research and evaluations of the use of different methods. It outlines step-by-step procedures and has appeal for parents, teachers, and anyone involved in training children. (DO)

# ABSTRACT 22265

EC 02 2265 ED N.A.  
Publ. Date Apr 70 Sp.

## The Use of Operant Techniques for Modifying the Behavior of the Severely and Profoundly Retarded: Part I. Introduction and Initial Phase.

EDRS not available  
Mental Retardation; V8 N2 P2-6 Apr 1970

Descriptors: exceptional child education; mentally handicapped; behavior change; operant conditioning; training techniques; trainable mentally handicapped; custodial mentally handicapped; program descriptions

The first of a series of three papers, the article presented in this issue outlines the initial phases of an operant program and the fundamental steps which must be taken to enhance the viability of the program. Papers II and III, which will appear in successive issues, will deal respectively with the application of the specific operant techniques and with the means available for the maintenance, in the absence of concrete reinforcement, of the acquired behaviors. (Author)

# ABSTRACT 22324

EC 02 2324 ED N.A.  
Publ. Date Mar 70 16p.

## Educationally Handicapped and the Engineered Classroom: An Educational Solution.

EDRS not available  
Focus On Exceptional Children; V2 N1 P1-16 Mar 1970

Descriptors: exceptional child education; learning disabilities; classroom arrangement; reinforcement; behavior change; educational programs; teaching methods; engineered classroom

The engineered classroom designed by Frank M. Hewett is described beginning with the developmental sequence of educational goals. The physical environment is diagrammed for both elementary and junior high school students. The use of reinforcement is discussed through the check mark system, and a list is presented of interventions to be used by teachers to maintain student roles. Also considered are materials and topics for the daily instructional program including scheduling of curriculum activities. (RJ)

# ABSTRACT 22348

EC 02 2348 ED N.A.  
Publ. Date 70 272p.

## How to Live with Your Special Child--A Handbook for Behavior Change.

EDRS not available  
Acropolis Books, 2400 17th Street, N. W., Washington, D. C. 20009 (\$7.50).

Descriptors: exceptional child education; emotionally disturbed; delinquents; behavior problems; behavior change; medical treatment; communication (thought transfer); tactical perception; perception; psychokinetics; Green Valley Residential School

The handbook presents techniques for behavior change in delinquent, emotionally disturbed, and non achieving adolescents. Written in a straightforward style, the text discusses physical and developmental needs, the importance of psychokinetics (including descriptions of a large number of exercises and contact suggestions), the integration of perception, motor communication, and words, reducing abstraction in language learning and relearning, self awareness through talking, techniques for controlling symptoms, elimination of fears, and tactics in operant conditioning. Appendixes contain descriptions of the Green Valley Institute, diagnostic categories, danger signs, materials sources, lesson plans, reading program descriptions, hints for volunteer workers, a test series, Green Valley medical procedures, and a history of Humanities. (JM)

# ABSTRACT 22363

EC 02 2363 ED N.A.  
Publ. Date Mar 70 10p.

## Using Token Reinforcements to Change Behavior in a Class of Adolescent Retardates.

EDRS not available  
Special Education In Canada, '44 N3 P9 18 Mar 1970

Descriptors: exceptional child research; mentally handicapped; behavior change; educable mentally handicapped; positive reinforcement; adolescents; behavior problems

To determine if behavior modification techniques could improve attitudes toward school in mentally handicapped



adolescents, and to attempt this technique in a one teacher classroom, 12 students (ages 13 to 18) were involved in such a program. A system of positive reinforcement with tokens was begun and eventually used as negative withdrawal for inappropriate behavior. The results of the program were significantly fewer cases of deviant behavior under reinforcement which led to a more conducive educational atmosphere in the classroom which in turn improved educational gains. The use of but a single teacher also appeared to be workable. (JM)

#### ABSTRACT 22370

EC 02 2370 ED N.A.  
Publ. Date Aug 67 13p.  
Brookshire, Robert H.  
**Speech Pathology and the Experimental Analysis of Behavior.**  
EDRS not available  
Journal Of Speech And Hearing Disorders; V32 N3 P215-27 Aug 1967

Descriptors: exceptional child education; speech therapy; behavior change; operant conditioning; reinforcement; stimulus behavior; conditioned response; speech handicapped; language handicapped

The experimental analyst's approach to problems in behavior modification and control is described and terminology explained. Operant conditioning procedures are explained and related to clinical speech pathology. (JD)

#### ABSTRACT 22421

EC 02 2421 ED N.A.  
Publ. Date Jan 70 14p.  
Carter, Robert D.; Stuart, Richard B.  
**Behavior Modification Theory and Practice: A Reply.**  
EDRS not available  
Social Work; V15 N1 P37-50 Jan 1970

Descriptors: emotionally disturbed; behavior change; social work; behavior theories; behavioral sciences; social psychology; psychotherapy; stimulus behavior

Written as a rebuttal to an article criticizing behavior modification theory, the paper defends the behavioral approach by discussing those points in Max Bruck's article which are considered erroneous. Topics dealt with are the success of behavioral therapy, the nature of responses, internal responding, behavior influences, the nature of a stimulus, the study of meaning, emotional factors, motivation, and self control. The concern is with behavioral therapy as it relates to social work. (JM)

#### ABSTRACT 22502

EC 02 2302 ED N.A.  
Publ. Date Jun 70 7p.  
Nawas, M. Mike; Braun, Stephen H.  
**The Use of Operant Techniques for Modifying the Behavior of the Severely and Profoundly Retarded: Part II: The Techniques.**  
EDRS not available  
Mental Retardation; V8 N3 P18-24 Jun 1970

Descriptors: exceptional child education; mentally handicapped; behavior change; reinforcement; custodial mentally handicapped; operant conditioning

The second part of the series of three papers on operant techniques, which are the major behavior modification group of procedures, discusses with illustrative research the various operant techniques for increasing the frequency of appropriate behavior and those used for decreasing the frequency of maladaptive or undesirable behaviors. Specifically, the following techniques are discussed: positive reinforcement, avoidance and escape procedures, imitation, extinction, punishment, and time-out. Various parameters of reinforcement, including schedules, amount, and timing, are also discussed. Attention is called to the shortcomings of certain techniques. (Author)

#### ABSTRACT 22539

EC 02 2339 ED 038 809  
Publ. Date Nov 69 92p.  
Hewett, Frank M. And Others  
**The Santa Monica Project: Demonstration and Evaluation of an Engineering Classroom Design for Emotionally Disturbed Children in the Public Schools: Phase Two: Primary and Secondary Level. Final Report.**  
Santa Monica Unified School District, California  
Office Of Education (DHEW), Washington, D. C. Bureau Of Research  
EDRS mf, hc  
OEG-0 8-071298-2799(032)  
HR-7-1298

Descriptors: exceptional child research; behavior problems; learning disabilities; behavior change; academically handicapped; reading; regular class placement; special classes; classroom environment; academic achievement; behavior rating scales; reinforcement; learning readiness; classroom organization; class management; Elementary and Secondary Education Act Title III Project; engineered classrooms

Following its initial year, an engineered classroom for educationally handicapped (EH) children was replicated and extended. Evaluation indicated that the program could effectively increase emphasis on reading and include both primary and secondary students. Reintegration in the regular classes for EH children could be done on both a gradual and compulsory basis; the difficulty was in accurately assessing a given child's readiness for limited or total reintegration. The preacademic focus of the primary classes (ages 6 to 8) was validated in that a majority of subjects from the 1st year who had returned to regular classes were average or above in their functioning after 1 or 2 years in the program. Also EH children in the engineered classroom; outdistanced children in regular EH classes and approached or exceeded normal controls academically and behaviorally. Appendixes describe the engineered classroom and its dissemination and provide a behavior problem checklist and instructions for a frequent

cy count of deviant behavior. (Author/JD)

#### ABSTRACT 22600

EC 02 2600 ED N.A.  
Publ. Date 69 122p.  
Neisworth, John T. And Others  
**Student Motivation and Classroom Management: A Behavioristic Approach.**  
EDRS not available  
Behavior Technics, Inc., P. O. Box 355, Newark, Delaware 19711.

Descriptors: teaching methods; behavior change; behavior theories; motivation; reinforcement; student behavior; student motivation; class management; class organization; classroom techniques; educational objectives

Designed to provide an introduction to teaching techniques based on behavior modification procedures, the manual is a result of a series of inservice programs. Basic principles of behavior are applied to practical educational problems. Procedures to build and maintain desirable performance and reduce or eliminate inappropriate student behavior are described. The topic of consequence management with groups is treated and examples of consequence management are provided. (MS)

#### ABSTRACT 22653

EC 02 2653 ED N.A.  
Publ. Date Jul 70 10p.  
Salzinger, Kurt  
**Behavior Theory and Problems of the Deaf.**  
EDRS not available  
American Annals Of The Deaf; V115 N4 P459-68 Jul 1970

Descriptors: exceptional child education; aurally handicapped; behavior patterns; operant conditioning; reinforcement; behavior change; behavior theories

Introduced by a defense of the behavior theory interpretation of man, the article discusses the principles of behavior theory, positive and negative reinforcement, the applications of behavior theory, and personal and social adjustment. Also described are the concepts of the avoidance paradigm, extinction, discriminative stimulus, the relation between discriminative stimulus and conditioned reinforcement, the introduction of new behavior, intermittent reinforcement, motivation, and respondent conditioning. (JM)

#### ABSTRACT 22654

EC 02 2654 ED N.A.  
Publ. Date Jul 70 5p.  
Lennax, Robert K.  
**Report on a Program for Emotionally Disturbed Deaf Boys.**  
EDRS not available  
American Annals Of The Deaf; V115 N4 P469-73 Jul 1970

Descriptors: exceptional child research; multiply handicapped; program evaluation; emotionally disturbed; aurally handicapped; program descriptions; behavior change; intervention

To determine the effectiveness of behavior modification techniques on the behavior of emotionally disturbed, deaf boys, 16 boys (between ages 7 and 12, IQ of 85 or slightly above) were enrolled in a 2 year program. Techniques used included positive reinforcement, gradual reward deferment, checkcards, interventions, dormitory checkcards, and a small (one to four) staff-student ratio. Seven of the subjects reportedly made satisfactory adjustments into the regular classroom and the others will be included in a further program. The conclusion is that behavior modification techniques can be useful in the education of the emotionally disturbed, deaf child. (JM)

#### ABSTRACT 22655

EC 02 2655 ED N.A.  
Publ. Date Jul 70 6p.  
Hewett, Frank M.  
**Student Assessment According to a Developmental Sequence of Educational Goals: Inventory.**  
EDRS not available  
American Annals Of The Deaf, V115 N4 P474-80 Jul 1970

Descriptors: exceptional child research; behavior change; student evaluation; evaluation techniques; task performance; check lists; rating scales

The student inventory makes use of brief descriptions of behavior which are checked and then plotted on a graph to indicate performance. Areas described are attention, response, exploratory, social, mastery, and achievement. The article consists solely of the checklist. (JM)

#### ABSTRACT 22656

EC 02 2656 ED N.A.  
Publ. Date Jul 70 11p  
Craig, Helen E.  
**Reinforcing Appropriate Visual Attending Behavior in Classes of Deaf Children.**  
EDRS not available  
American Annals Of The Deaf, V115 N4 P481-91 Jul 1970

Descriptors: exceptional child research; aurally handicapped; reinforcement; visual learning; attention control; operant conditioning

Three experiments were undertaken involving aurally handicapped children with visual attending problems (ages 6 to 10 years) to determine whether or not operant conditioning could increase visual attending. From 10% of attending approximately 25% of the time, at the end of the experiments the attending time had increased to about 80% overall. The experiments used behavior modification techniques including positive reinforcement (with and without extinction) with tokens and eventually only social reinforcement. The experiments were considered a success. (JM)

#### ABSTRACT 22756

EC 02 2756 ED 039 698  
Publ. Date 70 218p.  
Bradfield, Robert H., Ed.  
**Behavior Modification: The Human Effort.**

EDRS not available  
Dimensions Publishing Company, Box 4221, San Raphael, California 94903.

Descriptors: exceptional child research; behavior change; reinforcement; teaching methods; reinforcers; behavioral science research; learning disabilities; disadvantaged youth; preschool children; language development; schizophrenia; emotionally disturbed; moral values; productive thinking

To present the ideas and research of outstanding behaviorists which is directly related to the education of children, the authors tried to include a diverse group of educational situations. Two articles give an overview of behavior modification, while five educational applications are discussed. They concern learning problems, language acquisition, disadvantaged preschoolers, childhood psychoses, and thinking skills. Also considered are moral issues in behavior modification, the applied science of behavior therapy, and behavior modification as a very human endeavor. (RJ)

#### ABSTRACT 22771

EC 02 2771 ED N.A.  
Publ. Date 66 60p.  
Fisher, Jerome, Ed.; Harris, Robert E., Ed.

**Reinforcement Theory in Psychological Treatment—A Symposium. Research Monograph Number 2.**  
California State Department Of Mental Hygiene, Sacramento, Bureau Of Research  
EDRS not available  
Bureau Of Research, California State Department Of Mental Hygiene, Sacramento, California.

Descriptors: exceptional child research; mentally handicapped; behavior change; reinforcement; emotionally disturbed; educational theories; medical treatment; operant conditioning; mental illness; behavior patterns; practical nursing; patients (persons); self help programs; autism; custodial mentally handicapped; interpersonal competence; intellectual development

Four speakers consider reinforcement theory. Nathan B. Miron discusses behavior shaping and group nursing with severely retarded patients. Thomas S. Ball describes behavior shaping of self-help skills in the severely retarded child. Halmuth H. Schaefer reports investigations on operant conditioning procedures in a mental hospital, and J. Richard Metz reviews conditioning social and intellectual skills in autistic children. In discussions, Ernest R. Hilgard assesses Skinner's theory and Nathan Adler defines the place of behavior therapies in a generic system. (LE)

#### ABSTRACT 22797

EC 02 2797 ED N.A.  
Publ. Date May 70 9p.  
Kroth, Roger L. And Others  
**Teacher Application of Behavior Principles in Home and Classroom Environments.**  
EDRS not available

Focus On Exceptional Children: VI N3 P1-9 May 1970

Descriptors: exceptional child education; behavior change; classroom techniques; parent child relationship

Extensions and elaborations of the structured approach to behavior change are described. Application of behavior principles and evaluation of procedure are discussed. Basic assumptions and expectations in the application of behavior principles are presented. Also provided are examples of methodology and evaluation in the classroom and the home. (MS)

#### ABSTRACT 22807

EC 02 2807 ED 034 369  
Publ. Date Jun 69 348p.  
Brill, Richard G. And Others  
**Pilot Program with Seriously Emotionally Disturbed Deaf Children. Final Report.**  
California School For The Deaf, Riverside  
Office Of Education (DHEW), Washington, D. C., Bureau Of Research  
EDRS mf,hc  
OEG-4-7-062422-0208  
BR-6-2422

Descriptors: exceptional child research; aurally handicapped; behavior change; intervention; program descriptions; emotionally disturbed; deaf; academic achievement; parent education; interpersonal competence; programmed instruction; manual communication; reinforcement

A pilot project involved 21 emotionally disturbed deaf boys, all of whom had had no success in regular school attendance and several of whom had been excluded. Objectives were to modify behavior and to teach basic skills and subject content, enabling the boys to return to regular classes for the deaf. Features of the program were a small staff-pupil ratio; application of behavior modification, engineered instruction, individualized self instructional curriculum materials, coordinated classroom and dormitory activities, manual communication, and parent education. Results indicated significant changes in class conduct and self control and significant gains in reading and arithmetic. Parents were enthusiastic about changes in the child, but made no meaningful changes in their own personal dimensions. Of the boys, one returned to a psychiatric hospital and nine successfully returned to regular classes for the deaf. (Author/JD)

#### ABSTRACT 22883

EC 02 2883 ED 040 535  
Publ. Date (69) 35p.  
Allen, K. Eileen And Others  
**A Behavior Modification Classroom for Head Start Children with Problem Behaviors.**  
Washington University, Seattle, Child Development And Mental Retardation Center  
EDRS mf,hc

Descriptors: exceptional child research; behavior problems; emotionally disturbed; behavior change; preschool programs; case studies (education); reinforcement; Head Start

A demonstration Head Start class enrolled 12 to 15 children with problem behaviors. The class utilized behavior modification procedures with individualized programing and natural contingencies. Favorable results were noted; three case studies presented concern an aggressively disruptive child, a severely withdrawn child, and a child whose total behavior repertoire consisted of bizarre and maladaptive behaviors which delayed the acquisition of basic motor, social, and verbal skills. (Author/JD)

#### ABSTRACT 22884

EC 02 2884 ED 040 536  
Publ. Date 68 395p.  
Haring, Norris G.; Hayden, Alice H.  
**Instructional Improvement: Behavior Modification.**  
Child Study And Treatment Center, Fort Steilacoom, Washington  
Office Of Education (DHEW), Washington, D. C., Bureau Of Elementary And Secondary Education  
EDRS mf,lc

Descriptors: exceptional child education; behavior change; teaching methods; experimental programs; educational technology; controlled environment; research needs; autism; behavior problems; operant conditioning; program evaluation; reading instruction; computer assisted instruction; student evaluation; behavior development; administration; evaluation methods; special classes

Sixteen papers are provided. B.F. Skinner discusses the arrangement of contingencies for learning; Lloyd Homme describes behavioral engineering; and Frank Hewitt considers behavior modification in special education. Also treated are experimental education by Norris Haring, program evaluation by Arthur Lumsdaine, and administration of special classes by Harold Kunzelmann. John Cawley presents a system of initial reading instruction; Max Jerman surveys computer assisted instruction; and Thomas Robertson examines the impact of educational technology. Further papers are on teaching children with behavior disorders by Richard Whelan, developing cooperative social behavior by Laurence Peter, providing academic and social classroom management by Harold Kunzelmann, and using operant reinforcement with autistic children by Charles Ferster. In addition, Thomas Lovitt sets forth a basis for systematic replication of a contingency management classroom; Richard Kothera discusses educational environments and administration; and Max Mueller reviews trends in research in the education of the handicapped. (JD)

#### ABSTRACT 22985

EC 02 2985 ED N.A.  
Publ. Date Jul 70 6p.  
Bricker, William A.  
**Identifying and Modifying Behavioral**

Deficits.

EDRS not available  
American Journal Of Mental Deficiency, V75 N1 P:6-21 Jul 1970

Descriptors: exceptional child education; mentally handicapped; behavior change; behavior development; identification; educational methods; program development

The major focus in behavior modification is noted to be on procedures of instruction rather than on the process of learning itself. In the area of retarded development, this focal difference is shown to stress analyses of defects in the program of instruction and how to eliminate these defects rather than analyses of the defects inherent in the child's nervous system. Discussed are several changes to be made in current behavior modification technology if the techniques derived from this approach are to have broad and important consequences. These recommended changes include means for generalizing repertoires, establishing the validity, replicability, and efficiency of training programs, and using training programs as diagnostic instruments. (Author)

#### ABSTRACT 23001

EC 02 3001 ED N.A.  
Publ. Date Aug 70 11p.  
Steeves, Jan M. And Others  
**Self-Imposed Time-Out by Autistic Children During an Operant Training Program.**  
EDRS not available  
Behavior Therapy; V1 N3 P371-81 Aug 1970

Descriptors: exceptional child research; emotionally disturbed; autism; reinforcement; operant conditioning; self reward; reinforcers; time-out (TO)

Studies are mentioned which have used a time-out (TO) from positive reinforcement (a period of time when positive reinforcement is not available) as punishment, and others suggesting TO may have positive reinforcing properties under certain conditions. Described is a study to determine if autistic children would voluntarily impose TOs during operant training. Two autistic boys, Garry and Peter, received training on a verbal and a printing task. Correct responses were reinforced with tokens exchangeable for popcorn on a 5/1 ratio. When permitted, Garry voluntarily imposed 30-second TOs but was attentive during the rest of the session. When TOs were discontinued, his inattentiveness increased. Peter did not impose TOs, even when the token ratio was raised to 65/1, but his inattentiveness did increase as the ratio increased. Results suggest the necessity of further studies of the conditions under which TOs serve as punishers and as reinforcers, given their increasing use as punishment in behavioral applications with subnormal children. (KW)

#### ABSTRACT 23002

EC 2 3002 ED N.A.

Publ. Date Aug 70 23p.  
Staats, Arthur W. And Others  
**A Token-Reinforcement Remedial Reading Program Administered by Black Therapy-Technicians to Problem Black Children.**  
EDRS not available  
Behavior Therapy; V1 N3 P331-353 Aug 1970

Descriptors: exceptional child research; disadvantaged youth; remedial reading programs; reinforcement; paraprofessional school personnel; behavior change; teaching methods; motivation techniques

Thirty-two black ghetto children, considered problem learners, were studied in a four-to-five month experimental remedial program supervised by black subprofessional therapy-technicians under the direction of a behaviorally trained teacher. Reading materials in a stimulus-response presentation procedure were combined with a token reinforcement system of motivation. Detailed records were kept of each child's responses, the reinforcers received, and the words learned and retained, and test data was also used to evaluate results. Results showed that the procedures and reinforcement system used were effective in producing better attention and work behavior in the students and in the utilization and upgrading of unemployed black adults, although longer, more extensive programs are suggested to remediate long standing cases of educational failure, and to contribute to the solving of social as well as learning problems. (KW)

#### ABSTRACT 23095

EC 02 3095 ED N.A.  
Publ. Date 69 31p.  
Lindsley, Ogden R.  
**Direct Measurement and Prosthesis of Retarded Behavior.**  
Metropolitan State Hospital, Waltham, Massachusetts  
National Institute Of Mental Health, Washington, D. C., Psychopharmacology Service Center  
EDRS not available  
MH-05054  
Curriculum Bulletin; V25 N303 P1-31 Jun 1969

Descriptors: exceptional child education; mentally handicapped; behavior change; controlled environment; therapeutic environment; operant conditioning; behavior problems; behavior theories; models; theories; behavioral science research; educational methods

Based upon the thesis that children are not retarded, rather their behavior in average environments is sometimes retarded, this paper suggests techniques of designing prosthetic environments which would maximize behavioral efficiency. The use of free-operant conditioning in the education of the retarded is discussed and a five-component operant behavioral equation is presented. Information is provided on the use of free operant conditioning methods in

the development of behavior research laboratories to measure behavioral deficits. Suggestions for designing prosthetic environments to compensate for behavioral deficits are presented. The appendix provides an example of how educationally relevant areas are analyzed in the precision teaching Is equation. (MS)

#### ABSTRACT 23123

EC 02 3123 ED N.A.  
Publ. Date 70 9p.

Brown, Lou And Others  
Using Behavior Modification Principles to Teach Sight Vocabulary.

EDRS not available

Teaching Exceptional Children; V2 N3  
P120-8 Spr 1970

Descriptors: exceptional child research; mentally handicapped; behavior change; sight vocabulary; trainable mentally handicapped; educational methods; group instruction; individual instruction; program evaluation; learning processes

To determine whether or not behavior modification techniques could be used to teach trainable mentally handicapped students sight words, an individual and a group study were conducted. The procedure involved the presentation of 37 words in groups of three with positive reinforcement for correctly labeled words until all groups in the series were correctly named. It was theorized that modeling and positive reinforcement would assist the learning process and that the student would be increasingly proficient at naming as the learning set was established. The assumptions were proven true; the group experiment was even more successful than the individual because of the reinforcement of the peer group. It is felt that expectations should be increased for the mentally handicapped as studies such as this indicate that they can accomplish more than simply survival tasks. (JM)

#### ABSTRACT 23213

EC 02 3213 ED N.A.  
Publ. Date 70 11p.

Linford, Anthony G.; Duthie, James Hunter

The Use of Operant Technology to Induce Sustained Exertion in Young, Trainable Down's Syndrome Children.

Office Of Education (DHEW), Washington, D. C.;

Illinois Department Of Mental Health, Springfield;

National Institute Of Mental Health, Bethesda, Maryland, Public Health Service

EDRS not available

OEG-0-8-001025-1777(032)

Institute For Research On Exceptional Children, University Of Illinois, Urbana, Illinois 61801.

Published In The Contemporary Psychology Of Sport, May 1970.

Descriptors: exceptional child research; trainable mentally handicapped; mongolism; behavior change; exercise (physiology); physical education; teaching methods

The behavior modification technique of chaining was used to teach two young trainable mongoloid children a three task endurance, strength, and motor skill circuit. Subjects were first taught to transfer blocks in a shuttle run involving a total distance of 160 yards. Reinforcement was food or candy. Second task required subjects to climb an inclined ladder, go through and down, then complete the shuttle run. Final item involved lifting and dropping a 10-pound ball, then climbing ladder and running shuttle. When primary reinforcement was withdrawn, male subject showed a decrement in performance. The next day, social reinforcement was withdrawn and extinction was complete. On successive days, primary and social reinforcement were withdrawn from female subject, but no performance decrease was shown even after two more days. Examiner was then removed from room, and extinction occurred after two days. Behavior was brought under stimulus control again by reintroducing reinforcement. Study shows sustained high level exertion can be brought about in trainable children. Charts provide data on time required for shuttle runs, time required for circuit, and post-exercise heart rates. (MS)

#### ABSTRACT 23302

EC 02 3302 ED N.A.  
Publ. Date Mar 70 29p.

Salzinger, Kurt And Others  
Training Parents of Brain-Injured Children in the Use of Operant Conditioning Procedures.

New York State Department Of Mental Hygiene, New York

EDRS not available

Behavior Therapy; V1 N1 P4-32 Mar 1970

Descriptors: exceptional child research; neurologically handicapped; operant conditioning; parent participation; behavior change; behavior problems; parent education; parental background

Parents of brain-injured children were trained in operant conditioning techniques, so that they could provide functional descriptions of their children's problem behaviors and then formulate and carry out behavior modification programs. Background characteristics were obtained and various tests and observations made of the parents and children in order to find objective correlates of the parents' performance and the children's response to the programs. All parents who carried out the modification programs reported them effective. Others did not comprehend or keep records, or simply did not carry out the programs. Success was related to parents' educational level and to their performance on written tests of knowledge about operant conditioning and verbal ability. Implications for parent training are discussed. (KW)

#### ABSTRACT 23404

EC 02 3404 ED N.A.  
Publ. Date 70 9p.

Irwin, John V.

#### Speech Pathology and Behavior Modification.

EDRS not available

Acta Symbolica; V1 N1 P15-23 Spr 1970

Descriptors: exceptional child services; speech handicapped; language handicapped; speech pathology; speech therapy; behavior change; language learning; reinforcement; stimulus devices; behavior theories

The increasing interaction between speech pathology and behavior modification is discussed from the standpoint of traditional speech pathology. The types of constructs by which speech pathology historically and currently has organized its clinical thinking are defined as organic, psychodynamic, mathematical, and electronic. The general acceptance, dissatisfaction, and clinical limitations of construct approaches are discussed. The expansion of behavior modification, behaviorists' contributions to speech pathology, and techniques of eliciting new responses (including imitation, shaping, stimulus variation, and relevant instruction) are explained. Problem areas concerning the acceptance of behavior modification by traditional speech pathologists are described.

Also explained are some problems of language learning and remediation: acquisition of language, what to teach, carryover, reinforcement schedules, discriminatory stimuli, secondary reinforcement, unlearning, errorless discrimination, and symptom substitution. (GD)

#### ABSTRACT 23418

EC 02 3418 ED N.A.  
Publ. Date Aug 70 5p.

Treffry, Doug And Others

Operant Conditioning of Grooming Behavior of Severely Retarded Girls.

EDRS not available

Mental Retardation; V8 N4 P29-33 Aug 1970

Descriptors: exceptional child research; custodial mentally handicapped; operant conditioning; conditioned response; self care skills; educational methods; females; hygiene; behavior modification

A program was developed so that the regular nursing staff, during their normal, daily routine, could effectively teach severely mentally handicapped girls to wash and dry their hands and faces. The task was broken into twelve steps and each step was taught using positive reinforcement, fading, and time out punishment. At the start of the program, none of the girls could perform the steps without some physical guidance. By the ninth week, seven of the eleven subjects could perform the tasks without any physical guidance. The value of publishing procedural reports is discussed. (Author)

#### ABSTRACT 23423

EC 02 3423 ED N.A.  
Publ. Date Aug 70 8p.

Nawas, M. Mike; Braun, Stephen H.



**An Overview of Behavior Modification with the Severely and Profoundly Retarded: Part III, Maintenance of Change and Epilogue.**  
EDRS not available  
Mental Retardation; V8 N4 P4-11 Aug 1970

Descriptors: exceptional child education; custodial mentally handicapped; behavior change; operant conditioning; conditioned response; educational methods; behavior; reinforcement; mentally handicapped; self control

In this last installment of a series of three papers on operant techniques, the major behavior modification group of procedures, the authors discuss the methods available for building up the individual's repertoire of adaptive and complex behaviors. Also discussed are how the specific behaviors acquired can be maintained, how they take their proper place within the context of ongoing activities, and how they become self-sustaining and no longer in need of the concrete reinforcement which shaped them. Finally, future directions in research, application, and public attitudes toward the use of operant techniques are discussed. (Author)

#### ABSTRACT 23548

EC 02 3548 ED 042 281  
Publ. Date 69 12p.  
Straughan, James H. And Others  
**Steps in Behavior Modification.**  
Washington University, Seattle, Child Development And Mental Retardation Center  
EDRS mf,hc

Descriptors: exceptional child education; behavior change; evaluation methods; student behavior; child develop-

ment specialists; consultation programs; inservice teacher education

James H. Straughan lists five steps for modifying target behavior and four steps for working with teachers using behavior modification. Grant Martin and Harold Kunzelmann then outline an instructional program for pinpointing and recording classroom behaviors. (JD)

#### ABSTRACT 23568

EC 02 3568 ED 042 301  
Publ. Date May 70 28p.  
Stasts, Arthur W. And Others  
**A Token-Reinforcement Remedial Reading Program Administered by Instructional Technicians.**  
Wisconsin University, Madison, Research And Development Center For Cognitive Learning  
Office Of Education (DHEW), Washington, D. C.  
EDRS mf,hc  
OEC-5-10-154

Descriptors: exceptional child research; reinforcement; reading achievement; disadvantaged youth; behavior change; paraprofessional school personnel; behavior change; remedial programs

Instructional technicians administered a token reinforcement remedial reading program to 32 black ghetto children who were problem learners. In the 40.2 mean hours of training, the subjects made a mean of 78,505 reading responses; learned a mean of 726.8 words, retaining 81% short term and 59% long term; and received a mean monetary amount of \$21.34 worth of reinforcers. Test results indicated that the subjects did significantly better than the controls on a 100-word sample from the training materials. They also excelled on a standard reading achievement test, including the vocabulary section, and on both the

verbal and nonverbal portions of an intelligence test. (Author)(JD)

#### ABSTRACT 23571

EC 02 3571 ED 042 304  
Publ. Date 70 39p.  
Montgomery, Jacqueline; McBurney, Raymond D.  
**Operant Conditioning-Token Economy.**  
Camarillo State Hospital, California  
EDRS not available  
Camarillo State Hospital, Camarillo, California 93010.

Descriptors: mentally ill; mentally handicapped; operant conditioning; behavior change; positive reinforcement; program descriptions; adults; psychotherapy; institutionalized (persons); residential programs

Described is an Operant Conditioning-Token Economy Program, teaching patients to be responsible for their own behavior, to make choices, and to be motivated to change. The program was instigated with mentally ill patients in a state hospital and was later used with institutionalized mentally handicapped groups. After two years, only four of the original 140 chronic regressed schizophrenics had not progressed enough to be placed in the community. The problems of the seven operant conditioning-token economy programs set up are discussed and suggestions for successful planning and implementation are made. Considered are the main features of preparation, staff orientation, clarification of terms, mechanics of the basic reinforcement program, and construction of individual behavior modification plans. Sample forms for collecting observational data and maintaining complete information on behavior modification programs are included. (KW)



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